Prevention of Significant Deterioration: Getting a Permit

Background information

What is the Prevention of Significant Deterioration program?
The Prevention of Significant Deterioration, or PSD, permit program was developed by the United States Congress to prevent significant environmental impacts on "attainment areas" from large industrial sources of air pollution. Attainment areas are regions of the United States where air quality meets standards established by the federal Clean Air Act.

The PSD program is implemented by both federal and Washington State regulations. The regulations apply to new or modified air pollution sources that are classified as "major" relative to air pollution emissions potential, and that are proposing construction projects that may "significantly" increase their air pollutant emissions. Under the PSD program, the new construction or modification must use air pollution control equipment and procedures determined by the Department of Ecology to be the most effective for the project (Best Available Control Technology, or BACT). The applicant must also provide a detailed evaluation of the proposed project's air quality impact on the local and regional environment. This evaluation must address air quality, visibility, soils, vegetation, and any specific air quality issues that may apply in national parks or wilderness areas.

Why do we need the PSD program?
Before the PSD program was developed, construction projects in large industrial facilities were being permitted with the primary goal of not worsening air pollution in problematic areas, and improving it if possible. Congress realized that this needed to be extended to ensure that those areas with clean, healthy air would stay that way, and that industrial activity would not significantly impact protected (e.g., wilderness) areas.

Who has to get a PSD permit?
There are 28 specific industries or industrial processes that must meet the requirements of the PSD program if they emit, or have the potential to emit, at least 100 tons per year of any pollutant regulated by the federal Clean Air Act. These industries and processes are listed on page 2. For all other industries, the PSD program applies if they emit or have the potential to emit at least 250 tons per year of any of any regulated pollutant. Regulated pollutants that most commonly lead to source-wide PSD applicability include particulate matter, carbon monoxide, sulfur dioxide, volatile organic compounds, and nitrogen oxides.

Industrial facilities subject to the PSD program on a source-wide basis:
For these facilities, any projects involving construction or modification of pollutant-emitting processes will require a PSD permit if the potential emissions of a regulated pollutant are greater than its respective applicability threshold. In addition to the regulated pollutants mentioned above, the following pollutants frequently lead to the need for a PSD permit: fluorides, sulfuric acid mist, hydrogen sulfide, and total reduced sulfur. PSD relevant pollutants and thresholds are listed on page 2.

PSD permits

How does a source get a PSD permit?
In the state of Washington, projects involving construction or modification of a source of potential air pollutant emissions* must apply for a notice of construction approval from the local air quality agency or Ecology regional office having jurisdiction over the county in which the project is to be located. The agency will determine the PSD applicability of the proposed project. If the project is PSD applicable, the applicant must file a separate, generally more extensive, PSD application with Ecology's Air Quality Program in Lacey. The application will involve a detailed analysis of pollutant control technologies and estimations of pollutant emission impacts (direct and indirect) on the local and regional environment. Applicants usually hire an experienced consultant to prepare the application. Ecology advises that the applicant request a pre-application meeting with Ecology staff to clarify requirements and expectations in the application and permitting process.

Contact your local air pollution control agency for specific information about applying for a permit.

How long does it take to get a PSD permit?
A perfect application and a completely non-controversial permit should take 120 days from receipt of the application to issuance of the final permit. Most of this time is required by law and regulations to allow interested parties an opportunity for review. It is extremely rare for a PSD permit to be issued within this timeframe. It is more typical for the PSD process to take eight to 10 months from the date of receipt of the application. In extreme cases, usually involving controversial projects, it can take two or more years.

Although Ecology continually works toward smoother PSD permitting, it is inevitably a process of often contrary perspectives of the applicant, the public, environmental interest groups, and various involved local, state, and federal agencies. The right of these "stakeholders" for involvement is strongly protected in law and regulation. Ecology is the central negotiator in this process.

For more information

For more information about the PSD program or how to get a permit, access

http://www.ecy.wa.gov/programs/air/psd/PSD_Info_Site.html, or contact:

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Department of Ecology
Air Quality Program

Attachment

Industries or Industrial Processes Subject to PSD Requirements (if they have the potential to emit 100 tons per year or more of any pollutant regulated by the federal Clean Air Act)

- Fossil fuel-fired steam electric plants of more than 50 British thermal units per hour heat input;
- Coal cleaning plants (with thermal dryers);
- Kraft pulp mills;
- Portland cement plants;
- Primary zinc smelters;
- Iron and steel mill plants;
- Primary aluminum ore reduction plants;
- Primary copper smelters;
- Municipal **incinerators** capable of charging more than 50 tons of refuse per day;
- Hydrofluoric, sulfuric, and nitric acid plants;
- Petroleum refineries;
- Lime plants;
- Phosphate rock processing plants;
- Coke oven batteries;
- Sulfur recovery plants;
- Carbon black plants (furnace process);
- Primary lead smelters;
- Fuel conversion plants;
- Sintering plants;
- Secondary metal production plants;
- Fossil fuel boilers (or combinations thereof) totaling more than 250 million British thermal units per hour heat input;
- Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
- Taconite ore processing plants;
- Glass fiber processing plants; and
- Charcoal production plants.

Note: the PSD program applies to any industrial process if it has the potential to emit 250 tons per year or more of any of any regulated pollutant.